(U) UTT Configuration READ ME

(U) Overview

(S//SI//REL) The Unified Targeting Tool (UTT) makes it possible to transition from today's selector-centric mode of operation, where each type of selector is entered into a different targeting tool, to a target-centric system. In this system, selection management is converged and then streamlined and automated, thereby facilitating analyst operation and collaboration. UTT, a mission critical component of the TURBULENCE architecture, provides a single point-of-service. Analysts enter all of their targeting requests for intercept from global network communications as well as private networks that are resident on or accessible using the global network infrastructure, regardless of the types of selectors or access capabilities to be employed.

(U) UTT Dataflow

(U//FOUO) The UTT pushes selector targeting information to the Site Selection Distribution Manager (SSDM). The SSDM manages selector tasking at the field site. The SSDM receives the load/updates that were pushed from the UTT. It is responsible for any site-specific processing that must be performed before forwarding the appropriate subset of information to site-local collection systems.

(U//FOUO) Once messages are processed, the SSDM sends selector targeting information via MAILORDER to front-end collection systems at a field site (e.g., XKEYSCORE). The SSDM receives status back from these systems indicating whether or not the selector tasking was accepted or rejected and then returns status to the UTT in the form of load and update responses. The SSDM may also request, either automatically or manually by a local user, that the UTT send a complete reload of all selectors targeted for the site. Similarly, the field site's front-end collection systems may also request, either automatically or manually by a local user, that the SSDM send a complete reload of all selectors targeted for the site.

(U//FOUO) UTT Dataflow

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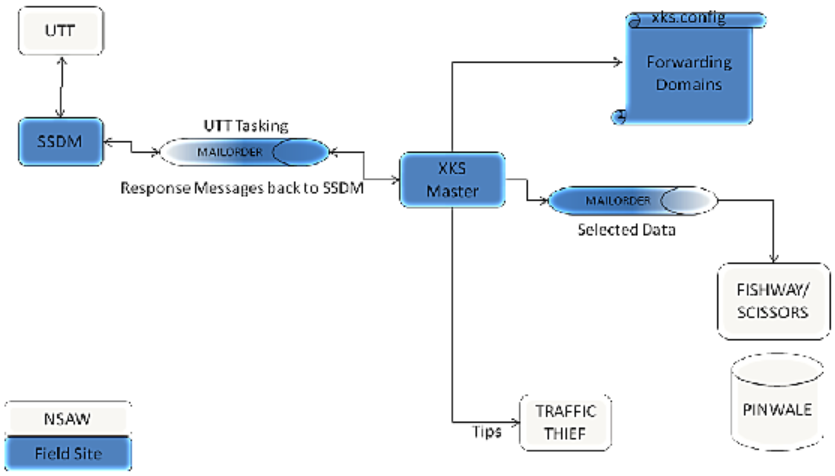

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(U//FOUO) This Readme file is intended as an aid for setting up the appropriate configurations to load, ingest, and scan data against UTT tasking. It does NOT address forwarding selected traffic to PINWALE. Configuring XKEYSCORE for UTT can be accomplished in three phases. First, you will address three pre-configuration requirements. Next you will configure *xks.config* and *xks.advanced.config* to enable UTT tasking and appropriate MAILORDER routing. Last, you will execute a group of set-up processes to ensure all configuration changes are fully implemented.

(U) Pre-Configuration Requirements

(U//FOUO) The Unified Targeting Tool (UTT) works hand-in-hand with the Site Selection Distribution Manager (SSDM). Therefore you must have:

- an SSDM in place at the field site.
- the SSDM's routing trigraph so XKEYSCORE can send response messages back to the SSDM.
- a routing trigraph for the XKEYSCORE Master.

(U/FOUO) Configuring UTT Selection in *xks.config*

(U//FOUO) Configuration for UTT selection and tasking can be accomplished in just seven steps:

1. (U//FOUO) Logon as the user `oper`.
2. (U//FOUO) At the command line from within any directory, type `viconfig` and then press `Enter`. The *xks.config* file will open.
3. (U//FOUO) In the *[dictionaries]* section of *xks.config*, set the following configurations:

   a. `utt = yes` : This enables UTT tasking. The default setting for this configuration is `no`.

   b. `ssdm_trigraph = [field site trigraph]` : This is the SSDM's trigraph for the field site. The default is `XXX, which will need to be changed.`
4. (U//FOUO) In the *[processes]* section of *xks.config* confirm that the MAILORDER configuration reads `mailorder = yes`. The default is `no`. This creates the `mailorder_proc` process.
5. (U//FOUO) In the *Mailorder inputs* section of *xks.config*, type `mailorder_input[0] = source:OO:AB,dir:ssdm`. This is the input configuration for `check_mailorder_site.php`. This particular configuration indicates that all incoming files in $XSCORE_DATA_DIR/inputs/mailorder that have a Producer Designator Digraph (PDDG) of OO and a source system digraph of AB will be moved to $XSCORE_DATA_DIR /inputs/ssdm.
6. (U//FOUO) In the *Plugin Config* section of *xks.config* is the following placemark:

   `forwarding_domain[] = PLACEHOLDER - DO NOT REMOVE - ADD ENTRIES BELOW`

   Below this placemark, type your own forwarding domains (i.e., routing trigraphs) like those identified in the *Forwarding Domains* chart. Forwarding Domains are in the form:

   `forwarding_domain[N] = key:value,key2:value2,...`

(U//FOUO) The `N` is an identifier (`forwarding_domain` parameter) between 1 and 12. One type of key is the `fdi` key. It indicates where to send collected data of the domain. The `value` associated with this key is the routing trigraph of the domain. The *Forwarding Domains* table shown below identifies the forwarding locations associated with each identifier (forwarding_domain parameter).

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Forwarding Domains	
Routing Trigraph	*Forward Location*
`forwarding_domain[1] = fdi:KFC`	1-NSA
`forwarding_domain[2] = fdi:SQP`	2-NSA (NOFORN Only)
`forwarding_domain[3] = fdi:KFC`	3-CSE
`forwarding_domain[4] = fdi:KFC`	4-CSE NOFORN
`forwarding_domain[5] = fdi:KFC`	5-DSD
`forwarding_domain[6] = fdi:KFC`	6-DSD NOFORN
`forwarding_domain[7] = fdi:KFC`	7-GCHQ
`forwarding_domain[8] = fdi:KFC`	8-GCHQ NOFORN
`forwarding_domain[9] = fdi:KFC`	9-GCSB
`forwarding_domain[10] = fdi:KFC`	10-GCSB NOFORN
`forwarding_domain[11] = fdi:KFC`	11-3rd Party
`forwarding_domain[12] = fdi:KFC`	12-Local Support

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7. (U/FOUO) Type `:wq!` and then press `Enter` to exit *xks.config*.

(U) Additional Processes

(U//FOUO) In addition to editing UTT/SSDM configurations in *xks.config* and *xks.advanced.config*, it is important to execute several set-up processes. As the `oper` user, execute the following commands only after entering the SSDM configurations in *xks.config*:

1. (U//FOUO) At the command prompt, type `xks setup processes` and press `Enter`. This creates the `check_mailorder_site.php` and `mailorder_proc` processes on the Master server.

2. (U//FOUO) At the command prompt, type `xks proc start` and press `Enter`. This will ensure all of the running processes pick up any configuration changes.

As a result of executing these commands, the following processes will begin:

- (U//FOUO) The `check_mailorder_site.php` process, which polls `$XSCORE_DATA_DIR/inputs/ssdm` and moves the SSDM MAILORDER file(s) to the `$XSCORE_DATA_DIR/inputs/ssdm` directory, according to the `[mailorder_input]` rule in the *xks.config* file.

  Note: If a MAILORDER input rule is changed *in xks.config*, then type `xks proc restart cms` to restart the `check_mailorder_site.php` process.

- (U//FOUO) The `mailorder_proc` process, which polls $XSCORE_DATA_DIR/outputs/mailorder_working directory and properly renames and moves any MAILORDER files to $XSCORE_DATA_DIR/outputs/mailorder for pick-up by MAILORDER.

- (U//FOUO) The `strong_selector_targeting` process , which polls$XSCORE_DATA_DIR /inputs/ssdm for any tasking updates or full loads. When it receives a message from the SSDM that updates are available, a response receipt is generated and sent to $XSCORE_DATA_DIR/outputs/mailorder_working. Next, `strong_selector_targeting` processes the UTT updates/tasking files and writes the processed files to $XSCORE_DIR/config/dictionaries/selectors/strong.selectors .

  (U//FOUO) Another receipt is generated after processing of an update/full load is complete. The message indicates success or failure and is also placed into $XSCORE_DATA_DIR /outputs/mailorder_working.

  Note: (U//FOUO) The `strong_selector_targeting` process will request a reload if it receives SIGUSR2, if it starts up and sees `utt.selectors` is still there, or if it starts up and has no targeting.